
ENGROSSED SENATE BILL 6423

State of Washington 54th Legislature 1996 Regular Session

By Senators Sutherland, Finkbeiner and Sheldon; by request of Secretary of State

Read first time 01/15/96. Referred to Committee on Energy, Telecommunications & Utilities.

- 1 AN ACT Relating to electronic signatures; adding a new chapter to
- 2 Title 19 RCW; prescribing penalties; and providing an effective date.
- 3 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- 4 PART I. SHORT TITLE, INTERPRETATION, AND DEFINITIONS
- 5 <u>NEW SECTION.</u> **Sec. 101.** SHORT TITLE. This chapter shall be known
- 6 and may be cited as the Washington electronic authentication act.
- 7 NEW SECTION. Sec. 102. PURPOSES AND CONSTRUCTION. This chapter
- 8 shall be construed consistently with what is commercially reasonable
- 9 under the circumstances and to effectuate the following purposes:
- 10 (1) To facilitate commerce by means of reliable electronic
- 11 messages;
- 12 (2) To minimize the incidence of forged digital signatures and
- 13 fraud in electronic commerce;
- 14 (3) To implement legally the general import of relevant standards,
- 15 such as X.509 of the international telecommunication union, formerly
- 16 known as the international telegraph and telephone consultative
- 17 committee; and

p. 1 ESB 6423

- 1 (4) To establish, in coordination with multiple states, uniform
- 2 rules regarding the authentication and reliability of electronic
- 3 messages.

- 4 <u>NEW SECTION.</u> **Sec. 103.** DEFINITIONS. Unless the context clearly
- 5 requires otherwise, the definitions in this section apply throughout
- 6 this chapter:
 - (1) "Accept a certificate" means either:
- 8 (a) To manifest approval of a certificate, while knowing or having 9 notice of its contents; or
- 10 (b) To apply to a licensed certification authority for a 11 certificate, without cancelling or revoking the application by
- 12 delivering notice of the cancellation or revocation to the
- 13 certification authority and obtaining a signed, written receipt from
- 14 the certification authority, if the certification authority
- 15 subsequently issues a certificate based on the application.
- 16 (2) "Asymmetric cryptosystem" means an algorithm or series of 17 algorithms that provide a secure key pair.
- 18 (3) "Certificate" means a computer-based record that:
- 19 (a) Identifies the certification authority issuing it;
- 20 (b) Names or identifies its subscriber;
- 21 (c) Contains the subscriber's public key; and
- 22 (d) Is digitally signed by the certification authority issuing it.
- 23 (4) "Certification authority" means a person who issues a 24 certificate.
- 25 (5) "Certification authority disclosure record" means an on-line,
- 26 publicly accessible record that concerns a licensed certification
- 27 authority and is kept by the secretary. A certification authority
- 28 disclosure record has the contents specified by rule by the secretary
- 29 under section 104 of this act.
- 30 (6) "Certification practice statement" means a declaration of the
- 31 practices that a certification authority employs in issuing
- 32 certificates generally, or employed in issuing a material certificate.
- 33 (7) "Certify" means to declare with reference to a certificate,
- 34 with ample opportunity to reflect, and with a duty to apprise oneself
- 35 of all material facts.
- 36 (8) "Confirm" means to ascertain through appropriate inquiry and
- 37 investigation.

- 1 (9) "Correspond," with reference to keys, means to belong to the 2 same key pair.
- 3 (10) "Digital signature" means a transformation of a message using 4 an asymmetric cryptosystem such that a person having the initial 5 message and the signer's public key can accurately determine:
- 6 (a) Whether the transformation was created using the private key 7 that corresponds to the signer's public key; and
- 8 (b) Whether the initial message has been altered since the 9 transformation was made.
- 10 (11) "Forge a digital signature" means either:
- 11 (a) To create a digital signature without the authorization of the 12 rightful holder of the private key; or
- 13 (b) To create a digital signature verifiable by a certificate 14 listing as subscriber a person who either:
 - (i) Does not exist; or

- 16 (ii) Does not hold the private key corresponding to the public key 17 listed in the certificate.
- 18 (12) "Hold a private key" means to be able to utilize a private 19 key.
- 20 (13) "Incorporate by reference" means to make one message a part of 21 another message by identifying the message to be incorporated and 22 expressing the intention that it be incorporated.
- 23 (14) "Issue a certificate" means the acts of a certification 24 authority in creating a certificate and notifying the subscriber listed 25 in the certificate of the contents of the certificate.
- (15) "Key pair" means a private key and its corresponding public key in an asymmetric cryptosystem, keys which have the property that the public key can verify a digital signature that the private key creates.
- 30 (16) "Licensed certification authority" means a certification 31 authority to whom a license has been issued by the secretary and whose 32 license is in effect.
- 33 (17) "Message" means a digital representation of information.
- 34 (18) "Notify" means to communicate a fact to another person in a 35 manner reasonably likely under the circumstances to impart knowledge of 36 the information to the other person.
- 37 (19) "Operative personnel" means one or more natural persons acting 38 as a certification authority or its agent, or in the employment of, or 39 under contract with, a certification authority, and who have:

p. 3 ESB 6423

- 1 (a) Managerial or policymaking responsibilities for the 2 certification authority; or
- 3 (b) Duties directly involving the issuance of certificates, 4 creation of private keys, or administration of a certification 5 authority's computing facilities.
- 6 (20) "Person" means a human being or an organization capable of signing a document, either legally or as a matter of fact.
- 8 (21) "Private key" means the key of a key pair used to create a 9 digital signature.
- 10 (22) "Public key" means the key of a key pair used to verify a 11 digital signature.
- 12 (23) "Publish" means to record or file in a repository.
- (24) "Qualified right to payment" means an award of damages against a licensed certification authority by a court having jurisdiction over the certification authority in a civil action for violation of this chapter.
- 17 (25) "Recipient" means a person who receives or has a digital 18 signature and is in a position to rely on it.
- 19 (26) "Recognized repository" means a repository recognized by the 20 secretary under section 501 of this act.
- 21 (27) "Recommended reliance limit" means the monetary amount 22 recommended for reliance on a certificate under section 309(1) of this 23 act.
- 24 (28) "Repository" means a system for storing and retrieving 25 certificates and other information relevant to digital signatures.
- (29) "Revoke a certificate" means to make a certificate ineffective permanently from a specified time forward. Revocation is effected by notation or inclusion in a set of revoked certificates, and does not imply that a revoked certificate is destroyed or made illegible.
- 30 (30) "Rightfully hold a private key" means the ability to utilize 31 a private key:
- 32 (a) That the holder or the holder's agents have not disclosed to a 33 person in violation of section 305(1) of this act; and
- 34 (b) That the holder has not obtained through theft, deceit, 35 eavesdropping, or other unlawful means.
- 36 (31) "Secretary" means the secretary of state.
- 37 (32) "Subscriber" means a person who:
- 38 (a) Is the subject listed in a certificate;
- 39 (b) Accepts the certificate; and

- 1 (c) Holds a private key that corresponds to a public key listed in 2 that certificate.
- 3 (33) "Suitable guaranty" means either a surety bond executed by a 4 surety authorized by the insurance commissioner to do business in this 5 state, or an irrevocable letter of credit issued by a financial 6 institution authorized to do business in this state by the department 7 of financial institutions, which, in either event, satisfies all of the 8 following requirements:
- 9 (a) It is issued payable to the secretary for the benefit of 10 persons holding qualified rights of payment against the licensed 11 certification authority named as the principal of the bond or customer 12 of the letter of credit;
- 13 (b) It is in an amount specified by rule by the secretary under 14 section 104 of this act;
- 15 (c) It states that it is issued for filing under this chapter;
- 16 (d) It specifies a term of effectiveness extending at least as long 17 as the term of the license to be issued to the certification authority; 18 and
- 19 (e) It is in a form prescribed or approved by rule by the 20 secretary.
- A suitable guaranty may also provide that the total annual liability on the guaranty to all persons making claims based on it may not exceed the face amount of the guaranty.
- 24 (34) "Suspend a certificate" means to make a certificate 25 ineffective temporarily for a specified time forward.
- 26 (35) "Time stamp" means either:

- 27 (a) To append or attach to a message, digital signature, or 28 certificate a digitally signed notation indicating at least the date, 29 time, and identity of the person appending or attaching the notation; 30 or
- 31 (b) The notation thus appended or attached.
- 32 (36) "Transactional certificate" means a valid certificate 33 incorporating by reference one or more digital signatures.
- 34 (37) "Trustworthy system" means computer hardware and software 35 that:
 - (a) Are reasonably secure from intrusion and misuse;
- 37 (b) Provide a reasonable level of availability, reliability, and 38 correct operation; and
- 39 (c) Are reasonably suited to performing their intended functions.

p. 5 ESB 6423

- 1 (38) "Valid certificate" means a certificate that:
- 2 (a) A licensed certification authority has issued;
- 3 (b) The subscriber listed in it has accepted;
- 4 (c) Has not been revoked or suspended; and
- 5 (d) Has not expired.
- 6 However, a transactional certificate is a valid certificate only in 7 relation to the digital signature incorporated in it by reference.
- 8 (39) "Verify a digital signature" means, in relation to a given 9 digital signature, message, and public key, to determine accurately 10 that:
- 11 (a) The digital signature was created by the private key 12 corresponding to the public key; and
- 13 (b) The message has not been altered since its digital signature 14 was created.
- NEW SECTION. Sec. 104. ROLE OF THE SECRETARY. (1) If six months 15 elapse during which time no certification authority is licensed in this 16 state, then the secretary shall be a certification authority, and may 17 18 issue, suspend, and revoke certificates in the manner prescribed for licensed certification authorities. Except for licensing requirements, 19 this chapter applies to the secretary with respect to certificates he 20 21 she issues. The secretary must discontinue acting 22 certification authority if another certification authority is licensed, 23 in a manner allowing reasonable transition to private enterprise.
- (2) The secretary must maintain a publicly accessible data base containing a certification authority disclosure record for each licensed certification authority. The secretary must publish the contents of the data base in at least one recognized repository.
- 28 (3) The secretary must adopt rules consistent with this chapter and 29 in furtherance of its purposes:
- 30 (a) To govern licensed certification authorities, their practice, 31 and the termination of a certification authority's practice;
- 32 (b) To determine an amount reasonably appropriate for a suitable 33 guaranty, in light of the burden a suitable guaranty places upon 34 licensed certification authorities and the assurance of quality and 35 financial responsibility it provides to persons who rely on 36 certificates issued by licensed certification authorities;
- 37 (c) To review software for use in creating digital signatures;

- 1 (d) To specify reasonable requirements for the form of certificates 2 issued by licensed certification authorities, in accordance with 3 generally accepted standards for digital signature certificates;
- 4 (e) To specify reasonable requirements for recordkeeping by 5 licensed certification authorities;
- (f) To specify reasonable requirements for the content, form, and sources of information in certification authority disclosure records, the updating and timeliness of the information, and other practices and policies relating to certification authority disclosure records;
- 10 (g) To specify the form of certification practice statements; and
- 11 (h) Otherwise to give effect to and implement this chapter.
- NEW SECTION. Sec. 105. FEES OF THE SECRETARY. The secretary may adopt rules establishing reasonable fees for all services rendered under this chapter, in amounts sufficient to compensate for the costs of all services under this chapter. All fees recovered by the secretary must be deposited in the state general fund.

17 PART II. LICENSING AND REGULATION OF CERTIFICATE AUTHORITIES

- NEW SECTION. Sec. 201. LICENSURE AND QUALIFICATIONS OF CERTIFICATION AUTHORITIES. (1) To obtain or retain a license, a certification authority must:
- 21 (a) Be the subscriber of a certificate published in a recognized 22 repository;
- (b) Employ as operative personnel only persons who have not been convicted within the past fifteen years of a felony or a crime involving fraud, false statement, or deception;
- 26 (c) Employ as operative personnel only persons who have 27 demonstrated knowledge and proficiency in following the requirements of 28 this chapter;
- 29 (d) File with the secretary a suitable guaranty, unless the 30 certification authority is a department, office, or official of a 31 state, city, or county governmental entity, provided that:
- (i) Each of the public entities in (d) of this subsection act through designated officials authorized by rule or ordinance to perform certification authority functions; or

p. 7 ESB 6423

- 1 (ii) This state or one of the public entities in (d) of this 2 subsection is the subscriber of all certificates issued by the 3 certification authority;
- 4 (e) Have the right to use a trustworthy system, including a secure 5 means for limiting access to its private key;
 - (f) Present proof to the secretary of having working capital reasonably sufficient, according to rules adopted by the secretary, to enable the applicant to conduct business as a certification authority;
- 9 (g) Maintain an office in this state or have established a 10 registered agent for service of process in this state; and
- 11 (h) Comply with all further licensing requirements established by 12 rule by the secretary.
- 13 (2) The secretary must issue a license to a certification authority 14 that:
 - (a) Is qualified under subsection (1) of this section;
- 16 (b) Applies in writing to the secretary for a license; and
- 17 (c) Pays a filing fee adopted by rule by the secretary.

7

8

15

- (3) The secretary may by rule classify licenses according to 18 19 specified limitations, such as a maximum number of outstanding certificates, cumulative maximum of recommended reliance limits in 20 certificates issued by the certification authority, or issuance only 21 within a single firm or organization, and the secretary may issue 22 23 licenses restricted according to the limits of each classification. A 24 certification authority acts as an unlicensed certification authority 25 issuing a certificate exceeding the restrictions of 26 certification authority's license.
- 27 (4) The secretary may revoke or suspend a certification authority's 28 license, in accordance with the administrative procedure act, chapter 29 34.05 RCW, for failure to comply with this chapter or for failure to 20 remain qualified under subsection (1) of this section.
- 31 (5) The secretary may recognize by rule the licensing or 32 authorization of certification authorities by other governmental 33 entities, provided that those licensing or authorization requirements 34 are substantially similar to those of this state. If licensing by 35 another government is so recognized:
- 36 (a) Sections 401 through 406 of this act apply to certificates 37 issued by the certification authorities licensed or authorized by that 38 government in the same manner as it applies to licensed certification 39 authorities of this state; and

- 1 (b) The liability limits of section 309 of this act apply to the 2 certification authorities licensed or authorized by that government in 3 the same manner as they apply to licensed certification authorities of 4 this state.
- (6) Unless the parties provide otherwise by contract between 5 themselves, the licensing requirements in this section do not affect 6 7 the effectiveness, enforceability, or validity of any digital 8 signature, except that sections 401 through 406 of this act do not 9 apply in relation to a digital signature that cannot be verified by a 10 certificate issued by an unlicensed certification authority. Further, the liability limits of section 309 of this act do not apply to 11 unlicensed certification authorities. 12
- NEW SECTION. Sec. 202. PERFORMANCE AUDITS. (1) A certified public accountant having expertise in computer security or an accredited computer security professional must audit the operations of each licensed certification authority at least once each year to evaluate compliance with this chapter. The secretary may by rule specify the qualifications of auditors.
- 19 (2) Based on information gathered in the audit, the auditor must 20 categorize the licensed certification authority's compliance as one of 21 the following:
- 22 (a) Full compliance. The certification authority appears to 23 conform to all applicable statutory and regulatory requirements.
- (b) Substantial compliance. The certification authority appears generally to conform to applicable statutory and regulatory requirements. However, one or more instances of noncompliance or of inability to demonstrate compliance were found in an audited sample, but were likely to be inconsequential.
- (c) Partial compliance. The certification authority appears to comply with some statutory and regulatory requirements, but was found not to have complied or not to be able to demonstrate compliance with one or more important safeguards.
- 33 (d) Noncompliance. The certification authority complies with few 34 or none of the statutory and regulatory requirements, fails to keep 35 adequate records to demonstrate compliance with more than a few 36 requirements, or refused to submit to an audit.
- The secretary must publish in the certification authority disclosure record it maintains for the certification authority the date

p. 9 ESB 6423

- 1 of the audit and the resulting categorization of the certification 2 authority.
- 3 (3) The secretary may exempt a licensed certification authority 4 from the requirements of subsection (1) of this section, if:
- 5 (a) The certification authority to be exempted requests exemption 6 in writing;
- 7 (b) The most recent performance audit, if any, of the certification 8 authority resulted in a finding of full or substantial compliance; and
- 9 (c) The certification authority declares under oath, affirmation, 10 or penalty of perjury that one or more of the following is true with

11 respect to the certification authority:

- 12 (i) The certification authority has issued fewer than six 13 certificates during the past year and the recommended reliance limits 14 of all of the certificates do not exceed ten thousand dollars;
- (ii) The aggregate lifetime of all certificates issued by the certification authority during the past year is less than thirty days and the recommended reliance limits of all of the certificates do not exceed ten thousand dollars; or
- 19 (iii) The recommended reliance limits of all certificates 20 outstanding and issued by the certification authority total less than 21 one thousand dollars.
- (4) If the certification authority's declaration under subsection (3) of this section falsely states a material fact, the certification authority has failed to comply with the performance audit requirements of this section.
- 26 (5) If a licensed certification authority is exempt under 27 subsection (3) of this section, the secretary must publish in the 28 certification authority disclosure record it maintains for the 29 certification authority that the certification authority is exempt from 30 the performance audit requirement.
- NEW SECTION. Sec. 203. ENFORCEMENT OF REQUIREMENTS FOR LICENSED CERTIFICATION AUTHORITIES. (1) The secretary may investigate the activities of a licensed certification authority material to its compliance with this chapter and issue orders to a certification authority to further its investigation and secure compliance with this chapter.

- 1 (2) The secretary may suspend or revoke the license of a 2 certification authority for its failure to comply with an order of the 3 secretary.
- 4 (3) The secretary may by order impose and collect a civil monetary 5 penalty for a violation of this chapter in an amount not to exceed five 6 thousand dollars per incident, or ninety percent of the recommended 7 reliance limit of a material certificate, whichever is less. In case 8 of a violation continuing for more than one day, each day is considered 9 a separate incident.
- 10 (4) The secretary may order a certification authority, which it has 11 found to be in violation of this chapter, to pay the costs incurred by 12 the secretary in prosecuting and adjudicating proceedings relative to 13 the order, and enforcing it.
- 14 (5) The secretary must exercise authority under this section in 15 accordance with the administrative procedure act, chapter 34.05 RCW, 16 and a licensed certification authority may obtain judicial review of 17 the secretary's actions as prescribed by chapter 34.05 RCW. The 18 secretary may also seek injunctive relief to compel compliance with an 19 order.
- NEW SECTION. Sec. 204. DANGEROUS ACTIVITIES BY A CERTIFICATION AUTHORITY PROHIBITED. (1) No certification authority, whether licensed or not, may conduct its business in a manner that creates an unreasonable risk of loss to subscribers of the certification authority, to persons relying on certificates issued by the certification authority, or to a repository.

27

28 29

30

3132

3334

3536

37

38

(2) The secretary may publish in the repository it provides, or elsewhere, brief statements advising subscribers, persons relying on digital signatures, or other repositories about activities of a certification authority, whether licensed or not, that create a risk prohibited by subsection (1) of this section. The certification authority named in a statement as creating or causing such a risk may protest the publication of the statement by filing a written defense of ten thousand bytes or less. Upon receipt of such a protest, the secretary must publish the protest along with the secretary's statement, and must promptly give the protesting certification authority notice and an opportunity to be heard. Following the hearing, the secretary must rescind the advisory statement if its publication was unwarranted under this section, cancel it if

p. 11 ESB 6423

- 1 publication is no longer warranted, continue or amend it if it remains
- 2 warranted, or take further legal action to eliminate or reduce a risk
- 3 prohibited by subsection (1) of this section. The secretary must
- 4 publish its decision in the repository it provides.
- 5 (3) In the manner provided by the administrative procedure act,
- 6 chapter 34.05 RCW, the secretary may issue orders and obtain
- 7 injunctions or other civil relief to prevent or restrain a
- 8 certification authority from violating this section, regardless of
- 9 whether the certification authority is licensed. This section does not
- 10 create a right of action in a person other than the secretary.

11 PART III. DUTIES OF CERTIFICATION AUTHORITIES AND SUBSCRIBERS

- 12 <u>NEW SECTION.</u> **Sec. 301.** GENERAL REQUIREMENTS FOR CERTIFICATION
- 13 AUTHORITIES. (1) A licensed certification authority or subscriber may
- 14 use only a trustworthy system:
- 15 (a) To issue, suspend, or revoke a certificate;
- 16 (b) To publish or give notice of the issuance, suspension, or
- 17 revocation of a certificate; or
- 18 (c) To create a private key.
- 19 (2) A licensed certification authority must disclose any material
- 20 certification practice statement, and any fact material to either the
- 21 reliability of a certificate that it has issued or its ability to
- 22 perform its services. A certification authority may require a signed,
- 23 written, and reasonably specific inquiry from an identified person, and
- 24 payment of reasonable compensation, as conditions precedent to
- 25 effecting a disclosure required in this subsection.
- 26 <u>NEW SECTION.</u> **Sec. 302.** ISSUANCE OF A CERTIFICATE. (1) A licensed
- 27 certification authority may issue a certificate to a subscriber only
- 28 after all of the following conditions are satisfied:
- 29 (a) The certification authority has received a request for issuance
- 30 signed by the prospective subscriber; and
- 31 (b) The certification authority has confirmed that:
- 32 (i) The prospective subscriber is the person to be listed in the
- 33 certificate to be issued;
- 34 (ii) If the prospective subscriber is acting through one or more
- 35 agents, the subscriber duly authorized the agent or agents to have

1 custody of the subscriber's private key and to request issuance of a 2 certificate listing the corresponding public key;

- (iii) The information in the certificate to be issued is accurate;
- 4 (iv) The prospective subscriber rightfully holds the private key 5 corresponding to the public key to be listed in the certificate;

3

22

2324

25

26

27

28 29

30

31

3233

34

35

3637

38 39

- 6 (v) The prospective subscriber holds a private key capable of 7 creating a digital signature; and
- 8 (vi) The public key to be listed in the certificate can be used to 9 verify a digital signature affixed by the private key held by the 10 prospective subscriber.
- 11 The requirements of this subsection may not be waived or disclaimed 12 by either the licensed certification authority, the subscriber, or 13 both.
- (2) If the subscriber accepts the issued certificate, the 14 15 certification authority must publish a signed copy of the certificate 16 in a recognized repository, as the certification authority and the 17 subscriber named in the certificate may agree, unless a contract between the certification authority and the subscriber provides 18 19 otherwise. If the subscriber does not accept the certificate, a 20 licensed certification authority must not publish it, or must cancel its publication if the certificate has already been published. 21
 - (3) Nothing in this section precludes a licensed certification authority from conforming to standards, certification practice statements, security plans, or contractual requirements more rigorous than, but nevertheless consistent with, this chapter.
 - (4) After issuing a certificate, a licensed certification authority must revoke it immediately upon confirming that it was not issued as required by this section. A licensed certification authority may also suspend a certificate that it has issued for a reasonable period not exceeding forty-eight hours as needed for an investigation to confirm grounds for revocation under this subsection. The certification authority must give notice to the subscriber as soon as practicable after a decision to revoke or suspend under this subsection.
 - (5) The secretary may order the licensed certification authority to suspend or revoke a certificate that the certification authority issued, if, after giving any required notice and opportunity for the certification authority and subscriber to be heard in accordance with the administrative procedure act, chapter 34.05 RCW, the secretary determines that:

p. 13 ESB 6423

- 1 (a) The certificate was issued without substantial compliance with 2 this section; and
- 3 (b) The noncompliance poses a significant risk to persons 4 reasonably relying on the certificate.
- 5 Upon determining that an emergency requires an immediate remedy,
- 6 and in accordance with the administrative procedure act, chapter 34.05
- 7 RCW, the secretary may issue an order suspending a certificate for a
- 8 period not to exceed forty-eight hours.
- 9 <u>NEW SECTION.</u> **Sec. 303.** WARRANTIES AND OBLIGATIONS OF
- 10 CERTIFICATION AUTHORITY UPON ISSUANCE OF A CERTIFICATE. (1) By issuing
- 11 a certificate, a licensed certification authority warrants to the
- 12 subscriber named in the certificate that:
- 13 (a) The certificate contains no information known to the
- 14 certification authority to be false;
- 15 (b) The certificate satisfies all material requirements of this
- 16 chapter; and
- 17 (c) The certification authority has not exceeded any limits of its
- 18 license in issuing the certificate.
- 19 The certification authority may not disclaim or limit the
- 20 warranties of this subsection.
- 21 (2) Unless the subscriber and certification authority otherwise
- 22 agree, a certification authority, by issuing a certificate, promises to
- 23 the subscriber:
- 24 (a) To act promptly to suspend or revoke a certificate in
- 25 accordance with section 306 or 307 of this act; and
- 26 (b) To notify the subscriber within a reasonable time of any facts
- 27 known to the certification authority that significantly affect the
- 28 validity or reliability of the certificate once it is issued.
- 29 (3) By issuing a certificate, a licensed certification authority
- 30 certifies to all who reasonably rely on the information contained in
- 31 the certificate that:
- 32 (a) The information in the certificate and listed as confirmed by
- 33 the certification authority is accurate;
- 34 (b) All information foreseeably material to the reliability of the
- 35 certificate is stated or incorporated by reference within the
- 36 certificate;
- 37 (c) The subscriber has accepted the certificate; and

- 1 (d) The licensed certification authority has complied with all 2 applicable laws of this state governing issuance of the certificate.
- 3 (4) By publishing a certificate, a licensed certification authority 4 certifies to the repository in which the certificate is published and 5 to all who reasonably rely on the information contained in the 6 certificate that the certification authority has issued the certificate 7 to the subscriber.
- NEW SECTION. Sec. 304. REPRESENTATIONS AND DUTIES UPON ACCEPTANCE
 OF A CERTIFICATE. (1) By accepting a certificate issued by a licensed
 certification authority, the subscriber listed in the certificate
 certifies to all who reasonably rely on the information contained in
 the certificate that:
- 13 (a) The subscriber rightfully holds the private key corresponding 14 to the public key listed in the certificate;
- (b) All representations made by the subscriber to the certification authority and material to the information listed in the certificate are true; and
- 18 (c) All material representations made by the subscriber to a 19 certification authority or made in the certificate and not confirmed by 20 the certification authority in issuing the certificate are true.

23

24

- (2) By requesting on behalf of a principal the issuance of a certificate naming the principal as subscriber, the requesting person certifies in that person's own right to all who reasonably rely on the information contained in the certificate that the requesting person:
- 25 (a) Holds all authority legally required to apply for issuance of 26 a certificate naming the principal as subscriber; and
- (b) Has authority to sign digitally on behalf of the principal, and, if that authority is limited in any way, adequate safeguards exist to prevent a digital signature exceeding the bounds of the person's authority.
- (3) No person may disclaim or contractually limit the application 31 of this section, nor obtain indemnity for its effects, if the 32 disclaimer, limitation, or indemnity restricts liability 33 for 34 misrepresentation as against persons reasonably relying on the certificate. 35
- 36 (4) By accepting a certificate, a subscriber undertakes to 37 indemnify the issuing certification authority for loss or damage caused 38 by issuance or publication of a certificate in reliance on:

p. 15 ESB 6423

- 1 (a) A false and material representation of fact by the subscriber; 2 or
- 3 (b) The failure by the subscriber to disclose a material fact;
- 4 if the representation or failure to disclose was made either with
- 5 intent to deceive the certification authority or a person relying on
- 6 the certificate, or with negligence. If the certification authority
- 7 issued the certificate at the request of one or more agents of the
- 8 subscriber, the agent or agents personally undertake to indemnify the
- 9 certification authority under this subsection, as if they were
- 10 accepting subscribers in their own right. The indemnity provided in
- 11 this section may not be disclaimed or contractually limited in scope.
- 12 However, a contract may provide consistent, additional terms regarding
- 13 the indemnification.
- 14 (5) In obtaining information of the subscriber material to issuance
- 15 of a certificate, the certification authority may require the
- 16 subscriber to certify the accuracy of relevant information under oath
- 17 or affirmation of truthfulness and under penalty of perjury.
- 18 <u>NEW SECTION.</u> **Sec. 305.** CONTROL OF THE PRIVATE KEY. (1) By
- 19 accepting a certificate issued by a licensed certification authority,
- 20 the subscriber identified in the certificate assumes a duty to exercise
- 21 reasonable care to retain control of the private key and prevent its
- 22 disclosure to a person not authorized to create the subscriber's
- 23 digital signature.
- 24 (2) A private key is the personal property of the subscriber who
- 25 rightfully holds it.
- 26 (3) If a certification authority holds the private key
- 27 corresponding to a public key listed in a certificate that it has
- 28 issued, the certification authority holds the private key as a
- 29 fiduciary of the subscriber named in the certificate, and may use that
- 30 private key only with the subscriber's prior, written approval, unless
- 31 the subscriber expressly grants the private key to the certification
- 32 authority and expressly permits the certification authority to hold the
- 33 private key according to other terms.
- 34 <u>NEW SECTION.</u> **Sec. 306.** SUSPENSION OF A CERTIFICATE. (1) Unless
- 35 the certification authority and the subscriber agree otherwise, the
- 36 licensed certification authority that issued a certificate that is not

1 a transactional certificate must suspend the certificate for a period 2 not to exceed forty-eight hours:

- 3 (a) Upon request by a person identifying himself or herself as the 4 subscriber named in the certificate, or as a person in a position 5 likely to know of a compromise of the security of a subscriber's 6 private key, such as an agent, business associate, employee, or member 7 of the immediate family of the subscriber; or
 - (b) By order of the secretary under section 302(5) of this act.

8

21

2223

24

25

26

27

28

2930

31

32

33

3435

3637

38

39

- 9 The certification authority need not confirm the identity or agency 10 of the person requesting suspension.
- 11 (2) Unless the certificate provides otherwise or the certificate is 12 a transactional certificate, the secretary or a county clerk may 13 suspend a certificate issued by a licensed certification authority for 14 a period of forty-eight hours, if:
- 15 (a) A person identifying himself or herself as the subscriber named 16 in the certificate or as an agent, business associate, employee, or 17 member of the immediate family of the subscriber requests suspension; 18 and
- 19 (b) The requester represents that the certification authority that 20 issued the certificate is unavailable.
 - The secretary or county clerk may require the person requesting suspension to provide evidence, including a statement under oath or affirmation, regarding his or her identity, authorization, or the unavailability of the issuing certification authority, and may decline to suspend the certificate in its discretion. The secretary or law enforcement agencies may investigate suspensions by the secretary or county clerk for possible wrongdoing by persons requesting suspension.
 - (3) Immediately upon suspension of a certificate by a licensed certification authority, the licensed certification authority must give notice of the suspension according to the specification in the certificate. If one or more repositories are specified, then the licensed certification authority must publish a signed notice of the suspension in all the repositories. If a repository no longer exists or refuses to accept publication, or if no repository is recognized under section 501 of this act, the licensed certification authority must also publish the notice in a recognized repository. If a certificate is suspended by the secretary or county clerk, the secretary or clerk must give notice as required in this subsection for a licensed certification authority, provided that the person requesting

p. 17 ESB 6423

- 1 suspension pays in advance any fee required by a repository for 2 publication of the notice of suspension.
- 3 (4) A certification authority must terminate a suspension initiated 4 by request only:
- 5 (a) If the subscriber named in the suspended certificate requests 6 termination of the suspension, the certification authority has 7 confirmed that the person requesting suspension is the subscriber or an 8 agent of the subscriber authorized to terminate the suspension; or
- 9 (b) When the certification authority discovers and confirms that 10 the request for the suspension was made without authorization by the 11 subscriber. However, this subsection (4)(b) does not require the 12 certification authority to confirm a request for suspension.
- (5) The contract between a subscriber and a licensed certification authority may limit or preclude requested suspension by the certification authority, or may provide otherwise for termination of a requested suspension. However, if the contract limits or precludes suspension by the secretary or county clerk when the issuing certification authority is unavailable, the limitation or preclusion is effective only if notice of it is published in the certificate.
- 20 (6) No person may knowingly or intentionally misrepresent to a 21 certification authority his or her identity or authorization in 22 requesting suspension of a certificate. Violation of this subsection 23 is a misdemeanor.
- (7) The subscriber is released from the duty to keep the private key secure under section 305(1) of this act while the certificate is suspended.
- NEW SECTION. Sec. 307. REVOCATION OF A CERTIFICATE. (1) A licensed certification authority must revoke a certificate that it is issued but which is not a transactional certificate, after:
- 30 (a) Receiving a request for revocation by the subscriber named in 31 the certificate; and
- 32 (b) Confirming that the person requesting revocation is the 33 subscriber, or is an agent of the subscriber with authority to request 34 the revocation.
- 35 (2) A licensed certification authority must confirm a request for 36 revocation and revoke a certificate within one business day after 37 receiving both a subscriber's written request and evidence reasonably

- 1 sufficient to confirm the identity and any agency of the person 2 requesting the suspension.
- 3 (3) A licensed certification authority must revoke a certificate 4 that it issued:
- 5 (a) Upon receiving a certified copy of the subscriber's death 6 certificate, or upon confirming by other evidence that the subscriber 7 is dead; or
- 8 (b) Upon presentation of documents effecting a dissolution of the 9 subscriber, or upon confirming by other evidence that the subscriber 10 has been dissolved or has ceased to exist.
- 11 (4) A licensed certification authority may revoke one or more 12 certificates that it issued if the certificates are or become 13 unreliable, regardless of whether the subscriber consents to the 14 revocation and notwithstanding a provision to the contrary in a 15 contract between the subscriber and certification authority.
- 16 (5) Immediately upon revocation of a certificate by a licensed 17 certification authority, the licensed certification authority must give notice of the revocation according to the specification in the 18 19 certificate. If one or more repositories are specified, then the 20 licensed certification authority must publish a signed notice of the revocation in all repositories. If a repository no longer exists or 21 refuses to accept publication, or if no repository is recognized under 22 23 section 501 of this act, then the licensed certification authority must also publish the notice in a recognized repository. 24
- 25 (6) A subscriber ceases to certify, as provided in section 304 of 26 this act, and has no further duty to keep the private key secure, as 27 required by section 305 of this act, in relation to the certificate 28 whose revocation the subscriber has requested, beginning at the earlier 29 of either:
- 30 (a) When notice of the revocation is published as required in 31 subsection (5) of this section; or
- 32 (b) One business day after the subscriber requests revocation in 33 writing, supplies to the issuing certification authority information 34 reasonably sufficient to confirm the request, and pays any 35 contractually required fee.
- 36 (7) Upon notification as required by subsection (5) of this 37 section, a licensed certification authority is discharged of its 38 warranties based on issuance of the revoked certificate and ceases to

p. 19 ESB 6423

- 1 certify as provided in section 303(2) and (3) of this act in relation
- 2 to the revoked certificate.
- 3 <u>NEW SECTION.</u> **Sec. 308.** EXPIRATION OF A CERTIFICATE. (1) A
- 4 certificate must indicate the date on which it expires, which is no
- 5 later than three years after its issuance, unless the certificate
- 6 specifies that it is effective for a longer period.
- 7 (2) When a certificate expires, the subscriber and certification
- 8 authority cease to certify as provided in this chapter and the
- 9 certification authority is discharged of its duties based on issuance,
- 10 in relation to the expired certificate.
- 11 <u>NEW SECTION.</u> **Sec. 309.** RECOMMENDED RELIANCE LIMITS AND LIABILITY.
- 12 (1) By specifying a recommended reliance limit in a certificate, the
- 13 issuing certification authority and accepting subscriber recommend that
- 14 persons rely on the certificate only to the extent that the total
- 15 amount at risk does not exceed the recommended reliance limit.
- 16 (2) Unless a licensed certification authority waives application of
- 17 this subsection, a licensed certification authority is:
- 18 (a) Not liable for a loss caused by reliance on a false or forged
- 19 digital signature of a subscriber, if, with respect to the false or
- 20 forged digital signature, the certification authority complied with all
- 21 material requirements of this chapter;
- 22 (b) Not liable in excess of the amount specified in the certificate
- 23 as its recommended reliance limit for either:
- 24 (i) A loss caused by reliance on a misrepresentation in the
- 25 certificate of a fact that the licensed certification authority is
- 26 required to confirm; or
- 27 (ii) Failure to comply with section 302 of this act in issuing the
- 28 certificate;
- 29 (c) Liable only for direct compensatory damages in an action to
- 30 recover a loss due to reliance on the certificate. Direct compensatory
- 31 damages do not include:
- 32 (i) Punitive or exemplary damages. Nothing in this chapter may be
- 33 interpreted to permit punitive or exemplary damages that would not
- 34 otherwise be permitted by the law of this state;
- 35 (ii) Damages for lost profits or opportunity; or
- 36 (iii) Damages for pain or suffering.

- Sec. 310. COLLECTION BASED ON SUITABLE GUARANTY. 1 NEW SECTION.
- 2 (1) Notwithstanding any provision in the suitable guaranty to the 3 contrary:
- 4 (a) If the suitable guaranty is a surety bond, a person may recover 5 from the surety the full amount of a qualified right to payment against the principal named in the bond, or, if there is more than one such 6 7 qualified right to payment during the term of the bond, a ratable 8 share, up to a maximum total liability of the surety equal to the 9 amount of the bond; or

11 12

13

14 15

16

21

25

- (b) If the suitable guaranty is a letter of credit, a person may recover from the issuing financial institution the full amount of a qualified right to payment against the customer named in the letter of credit, or, if there is more than one such qualified right to payment during the term of the letter of credit, a ratable share, up to a maximum total liability of the issuer equal to the amount of the credit.
- 17 Claimants may recover successively on the same suitable quaranty, provided that the total liability on the suitable guaranty to all 18 19 persons making qualified rights of payment during its term must not 20 exceed the amount of the suitable guaranty.
- (2) In addition to recovering the amount of a qualified right to payment, a claimant may recover from the proceeds of the guaranty, 22 until depleted, the attorneys' fees, reasonable in amount, and court 23 24 costs incurred by the claimant in collecting the claim, provided that the total liability on the suitable guaranty to all persons making 26 qualified rights of payment or recovering attorneys' fees during its 27 term must not exceed the amount of the suitable guaranty.
- (3) To recover a qualified right to payment against a surety or 28 issuer of a suitable guaranty, the claimant must: 29
- 30 (a) File written notice of the claim with the secretary stating the name and address of the claimant, the amount claimed, and the grounds 31 for the qualified right to payment, and any other information required 32 33 by rule by the secretary; and
- 34 (b) Append to the notice a certified copy of the judgment on which 35 the qualified right to payment is based.
- Recovery of a qualified right to payment from the proceeds of the 36 suitable guaranty is barred unless the claimant substantially complies 37 with this subsection (3). 38

p. 21 ESB 6423

- 1 (4) Recovery of a qualified right to payment from the proceeds of
- 2 a suitable guaranty are forever barred unless notice of the claim is
- 3 filed as required in subsection (3) of this section within three years
- 4 after the occurrence of the violation of this chapter that is the basis
- 5 for the claim.

6 PART IV. EFFECT OF A DIGITAL SIGNATURE

- 7 NEW SECTION. Sec. 401. SATISFACTION OF SIGNATURE REQUIREMENTS.
- 8 Where a rule of law requires a signature, or provides for certain
- 9 consequences in the absence of a signature, that rule is satisfied by
- 10 a digital signature, if:
- 11 (1) That digital signature is verified by reference to the public
- 12 key listed in a valid certificate issued by a licensed certification
- 13 authority;
- 14 (2) That digital signature was affixed by the signer with the
- 15 intention of signing the message; and
- 16 (3) The recipient has no knowledge or notice that the signer
- 17 either:
- 18 (a) Breached a duty as a subscriber; or
- 19 (b) Does not rightfully hold the private key used to affix the
- 20 digital signature.
- 21 However, nothing in this chapter precludes a mark from being valid
- 22 as a signature under other applicable law.
- 23 <u>NEW SECTION.</u> Sec. 402. UNRELIABLE DIGITAL SIGNATURES. Unless
- 24 otherwise provided by law or contract, the recipient of a digital
- 25 signature assumes the risk that a digital signature is forged, if
- 26 reliance on the digital signature is not reasonable under the
- 27 circumstances. If the recipient determines not to rely on a digital
- 28 signature under this section, the recipient must promptly notify the
- 29 signer of any determination not to rely on a digital signature and the
- 30 grounds for that determination.
- 31 NEW SECTION. Sec. 403. DIGITALLY SIGNED DOCUMENT IS WRITTEN. A
- 32 message is as valid, enforceable, and effective as if it had been
- 33 written on paper, if it:
- 34 (1) Bears in its entirety a digital signature; and

- 1 (2) That digital signature is verified by the public key listed in 2 a certificate that:
 - (a) Was issued by a licensed certification authority; and
- 4 (b) Was valid at the time the digital signature was created.
- NEW SECTION. Sec. 404. DIGITALLY SIGNED ORIGINALS. A copy of a digitally signed message is as effective, valid, and enforceable as the original of the message, unless it is evident that the signer designated an instance of the digitally signed message to be a unique original, in which case only that instance constitutes the valid, effective, and enforceable message.
- NEW SECTION. Sec. 405. CERTIFICATE AS AN ACKNOWLEDGMENT. Unless 11 12 otherwise provided by law or contract, a certificate issued by a 13 licensed certification authority is an acknowledgment of a digital 14 signature verified by reference to the public key listed in the 15 certificate, regardless of whether words of an express acknowledgment appear with the digital signature and regardless of whether the signer 16 17 physically appeared before the certification authority when the digital 18 signature was created, if that digital signature is:
- 19 (1) Verifiable by that certificate; and

- 20 (2) Affixed when that certificate was valid.
- NEW SECTION. Sec. 406. PRESUMPTIONS IN ADJUDICATING DISPUTES. In adjudicating a dispute involving a digital signature, a court of this state presumes that:
- (1) A certificate digitally signed by a licensed certification authority and either published in a recognized repository, or made available by the issuing certification authority or by the subscriber listed in the certificate is issued by the certification authority that digitally signed it and is accepted by the subscriber listed in it.
- 29 (2) The information listed in a valid certificate and confirmed by 30 a licensed certification authority issuing the certificate is accurate.
- 31 (3) If a digital signature is verified by the public key listed in 32 a valid certificate issued by a licensed certification authority:
- 33 (a) That digital signature is the digital signature of the 34 subscriber listed in that certificate;
- 35 (b) That digital signature was affixed by that subscriber with the 36 intention of signing the message; and

p. 23 ESB 6423

- 1 (c) The recipient of that digital signature has no knowledge or 2 notice that the signer:
- 3 (i) Breached a duty as a subscriber; or
- 4 (ii) Does not rightfully hold the private key used to affix the 5 digital signature.
- 6 (4) A digital signature was created before it was time stamped by 7 a disinterested person utilizing a trustworthy system.

8 PART V. REPOSITORIES

- 9 <u>NEW SECTION.</u> **Sec. 501.** RECOGNITION OF REPOSITORIES. (1) The 10 secretary must recognize one or more repositories, after finding that 11 a repository to be recognized:
- 12 (a) Is operated under the direction of a licensed certification 13 authority;
- 14 (b) Includes a data base containing:
- 15 (i) Certificates published in the repository;
- 16 (ii) Notices of suspended or revoked certificates published by 17 licensed certification authorities or other persons suspending or 18 revoking certificates;
- 19 (iii) Certification authority disclosure records for licensed 20 certification authorities;
- 21 (iv) All orders or advisory statements published by the secretary 22 in regulating certification authorities; and
- (v) Other information adopted by rule by the secretary;
- (c) Operates by means of a trustworthy system;
- 25 (d) Contains no significant amount of information that is known or 26 likely to be untrue, inaccurate, or not reasonably reliable;
- (e) Contains certificates published by certification authorities that conform to legally binding requirements that the secretary finds to be substantially similar to, or more stringent toward the certification authorities, than those of this state;
- 30 Certification authorities, than those of this state,
- 31 (f) Keeps an archive of certificates that have been suspended or 32 revoked, or that have expired, within at least the past three years; 33 and
- 34 (g) Complies with other reasonable requirements adopted by rule by 35 the secretary.
- 36 (2) A repository may apply to the secretary for recognition by 37 filing a written request and providing evidence to the secretary

- 1 sufficient for the secretary to find that the conditions for 2 recognition are satisfied.
- 3 (3) A repository may discontinue its recognition by filing thirty
 4 days' written notice with the secretary. In addition the secretary may
 5 discontinue recognition of a repository in accordance with the
 6 administrative procedure act, chapter 34.05 RCW, if it concludes that
 7 the repository no longer satisfies the conditions for recognition
 8 listed in this section or in rules adopted by the secretary.
- 9 NEW SECTION. Sec. 502. LIABILITY OF REPOSITORIES. (1)Notwithstanding a disclaimer by the repository or a contract to the 10 contrary between the repository, a certification authority, or a 11 12 subscriber, a repository is liable for a loss incurred by a person reasonably relying on a digital signature verified by the public key 13 14 listed in a suspended or revoked certificate, if loss was incurred more 15 than one business day after receipt by the repository of a request to publish notice of the suspension or revocation, and the repository had 16 failed to publish the notice when the person relied on the digital 17 18 signature.
- 19 (2) Unless waived, a recognized repository or the owner or operator 20 of a recognized repository is:
- 21 (a) Not liable for failure to record publication of a suspension or 22 revocation, unless the repository has received notice of publication 23 and one business day has elapsed since the notice was received;
- (b) Not liable under subsection (1) of this section in excess of the amount specified in the certificate as the recommended reliance limit;
- (c) Liable under subsection (1) of this section only for direct compensatory damages, which do not include:
 - (i) Punitive or exemplary damages;

- 30 (ii) Damages for lost profits or opportunity; or
- 31 (iii) Damages for pain or suffering;
- (d) Not liable for misrepresentation in a certificate published bya licensed certification authority;
- (e) Not liable for accurately recording or reporting information that a licensed certification authority, or court clerk, or the secretary has published as required or permitted in this chapter, including information about suspension or revocation of a certificate;

p. 25 ESB 6423

(f) Not liable for reporting information about a certification authority, a certificate, or a subscriber, if the information is published as required or permitted in this chapter or a rule adopted by the secretary, or is published by order of the secretary in the performance of the licensing and regulatory duties of that office under this chapter.

7 PART VI. MISCELLANEOUS

- 8 <u>NEW SECTION.</u> **Sec. 601.** LEGISLATIVE DIRECTIVE. Sections 101 9 through 502 and 604 of this act shall constitute a new chapter in Title 10 19 RCW.
- 11 <u>NEW SECTION.</u> **Sec. 602.** EFFECTIVE DATE. This act shall take 12 effect January 1, 1998.
- NEW SECTION. Sec. 603. SEVERABILITY. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.
- NEW SECTION. Sec. 604. PART HEADINGS AND SECTION CAPTIONS. Part headings and section captions as used in this act do not constitute any part of the law.

--- END ---